IN THE CLAIMS

1-10. (cancelled)

11. (original) A system for use in testing an article having a thermal-spray coating thereon, said system comprising:

a turntable having a thermally-coated substrate article positioned thereon;

an eddy current probe operatively coupled to said substrate article, said eddy current probe configured to generate an eddy current within said coated substrate article and to measure the eddy current within said coated substrate article; and

a processor configured to determine a near-bondline region of said coated article located adjacent to a bondline using the measured eddy current.

12. (original) A system in accordance with Claim 11 wherein said eddy current probe comprises a cam follower probe configured to translate along an outer periphery of said coated substrate article; and to generate an eddy current within said coated substrate article.

13. (original) A system in accordance with Claim 12 further comprising a robotic arm coupled to said cam follower probe, said robotic arm configured to receive instructions from a computer and to translate said cam follower probe along an outer periphery of said coated substrate article in accordance with said received instruction.

14. (original) A system in accordance with Claim 11 wherein said eddy current probe comprises:

a drive coil;

a pulse generator operable to energize said drive coil in a pulsed manner to transmit a transient electromagnetic flux to into a metallic object under inspection; and

at least one sensor operable to generate output signals representative of time varying eddy currents produced in said coated article substrate from said transient electromagnetic flux.

15. (original) A system in accordance with Claim 14 wherein said at least one sensor is configured to determine a near bond-line fault that is less than approximately 0.03125 inches in depth, and less than approximately 0.020 inches in width.

16. (original) A system in accordance with Claim 14 further comprising a processor coupled to said at least one sensor and configured to:

measure the output signals representative of the time-varying eddy currents resulting from said transient electromagnetic flux;

determine whether measured output signals exceed a predetermined threshold.

17. (original) A system in accordance with Claim 11 further comprising a data acquisition/control system configured to record an output received from said eddy current probe.

18. (original) A system in accordance with Claim 11 wherein said turntable is configured to rotate while said eddy current probe is generating an eddy current within said coated substrate article.

19. (original) A system in accordance with Claim 11 wherein said coated substrate article comprises a gas turbine engine stationary seal.

20. (original) A system in accordance with Claim 19 wherein said gas turbine engine stationary seal comprises a metallic material thermally sprayed onto a surface of said stationary seal.